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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SALL, EL HADJI MALICK	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/081,898	JOHAL ET AL.	
	Examiner	Art Unit	
	El Hadji M. Sall	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on February 20, 2004. Claims 1-15 are pending. Claims 1-15 represent methods and systems for using distributed business data using observation technology to avoid the need to integrate servers and clients.

2. ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb et al. U.S. 6,747,970 in view of Nelson et al. U.S. 6,466,974.

Lamb teaches the invention substantially including method and apparatus for providing communications services between connectionless and connection-oriented networks.

As to claim 1, Nelson teaches a method of processing information from a plurality of distributed databases by a software application program, said plurality of distributed databases and said software application program connected by a communication network, said method comprising:

Assigning a plurality of software observation agents to said plurality of distributed databases with one software observation agent assigned to a different one of said plurality of distributed databases (figure 11);

each of said software observation agents operating under an observation rule to detect changes in its associated database (column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

operating under said observation rule by each of said plurality of software observation agents to notify a plurality of software notify agents, via said communication network (column 45, line 59 to column 46, line 8, Lamb discloses the message requires that one or more user agents 301 receive the message, then the runtime environment 300 processes step 504 which causes the runtime environment 300 to notify the required associated user agents 301 of the message(s) via the agent/inter-agent interface 305-4 (FIG. 5B));

operating under said notifying rule by each of said plurality of software notify agents to transmit a notification a software agent, via said communication network

(column 45, line 59 to column 46, line 8, Lamb discloses the message requires that one or more user agents 301 receive the message, then the runtime environment 300 processes step 504 which causes the runtime environment 300 to notify the required associated user agents 301 of the message(s) via the agent/inter-agent interface 305-4 (FIG. 5B));

said software agent for supplying said notification to said software application program (figure 11);

wherein said software application program is responsive to changes detected in the plurality of distributed databases (column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

Lamb fails to teach explicitly each of said software notify agents operating under a notifying rule to notify a particular software listening agent.

However, Nelson teaches environment for creating and managing network management software objects. Nelson teach each of said software notify agents operating under a notifying rule to notify a particular software listening agent (column 3, lines 3-6, Nelson discloses the management of the JDMK agent object is performed in conjunction with a daemon that listens for notifications indicating a change has been made to the JDMK agent object).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide each of said software notify agents operating under a notifying rule to notify a particular software listening agent. One would be motivated to so to allow monitoring the network.

Lamb fails to teach explicitly software listening agent.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide operating under said notifying rule by each of said plurality of software notify agents to transmit a notification to a software listening agent, via said communication network; and said software listening agent for supplying said notification to said software application program. One would be motivated to do so to allow monitoring the network.

As to claim 2, Lamb teaches the method of claim 1.

Lamb fails to teach explicitly software listening agent operates under a listening rule to filter said notification, prior to supplying said notification to said software application program.

However, Nelson teaches filtering (figure 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lamb in view of Nelson to provide software listening agent operates under a listening rule to filter said notification, prior to supplying said notification to said software application program. One would be motivated to do so to allow preventing false notification to be transmitted.

As to claim 3, Lamb teaches the method of claim 2.

Lamb fails to teach explicitly operating said software application program based upon said filtered notification from said software listening agent.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide operating said software application program based upon said filtered notification from said software listening agent. One would be motivated to do so to allow monitoring the network.

As to claim 4, Lamb teaches the method of claim 1 wherein each of said software observation agent, notify agent and listening agent is a JAVA program (column 29,

lines 14-18, Lamb discloses the user agent interface may include a version of a Java-based software application).

As to claim 5, lamb teaches a method of operating a software application program in response to changes in data from a plurality of distributed databases, said method comprising:

detecting changes in data from said plurality of distributed databases by a plurality of software observation agents, with one software observation agent assigned to a different one of said plurality of distributed databases (figure 11; column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

with each of said software observation agents operating under an observation rule (figure 9);

notifying a plurality of software notify agents by said plurality of software observation agents, in response to operating under said observation rule (column 45, line 59 to column 46, line 8, Lamb discloses the message requires that one or more user agents 301 receive the message, then the runtime environment 300 processes step 504 which causes the runtime environment 300 to notify the required associated user agents 301 of the message(s) via the agent/inter-agent interface 305-4 (FIG. 5B));

operating under a notifying rule by each of said plurality of software notify agents to transmit a notification to a software agent (column 45, line 59 to column 46, line 8, Lamb discloses the message requires that one or more user agents 301 receive the message, then the runtime environment 300 processes step 504 which causes the runtime environment 300 to notify the required associated user agents 301 of the message(s) via the agent/inter-agent interface 305-4 (FIG. 5B));

supplying said notification to said software application program by said software agent, operating under a listening rule (figure 11);

wherein said software application program is responsive to changes in data from said plurality of distributed databases (column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

Lamb fails to teach explicitly software listening agent.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide operating under a notifying rule by each of said plurality of software notify agents to transmit a notification to a software listening agent; and supplying said notification to said software application program by said software listening agent, operating under a listening rule. One would be motivated to do so to allow monitoring the network.

As to claim 6, Lamb teaches the method of claim 5 wherein said plurality of distributed databases and said software application program are connected by a communication network, and wherein said plurality of software observation agents, and said plurality of notify agents, and said listening agent communicate via said communication network (figure 4).

Lamb fails to teach explicitly software listening agent.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide distributed databases and said software application program are connected by a communication network, and wherein

said plurality of software observation agents, and said plurality of notify agents communicate via said communication network. One would be motivated to do so to allow monitoring the network.

As to claim 7, Lamb teaches a database management system comprising:

a plurality of server based computers having a plurality of distributed databases for storing data (figure 3);

a client based computer for operating a software application program (figure 3);

a communication network connecting said plurality of server based computers and said client-based computer (figure 4);

a plurality of software observation agents, with one software observation agent assigned to a different one of said plurality of distributed databases for detecting changes in said data in the associated database (figure 11; column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

each of said software observation agent having an associated observation rule, and for generating an observation in response thereto (column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

a plurality of software notify agents for receiving said observation from said

plurality of software observation agents, each of said plurality of software notify agents having an associated notify rule and for generating a notification in response thereto communicated over said communication network (figure 11; column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected)).

Lamb fails to teach explicitly a software listening agent for receiving said notification from said plurality of software notify agents via said communication network.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide a software listening agent for receiving said notification from said plurality of software notify agents via said communication network. One would be motivated to do so to allow monitoring the network.

Lamb fails to teach explicitly software listening agent having an associated listening rule for filtering said notification and for notifying said software application program.

However, Nelson teaches filtering (figure 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide software listening agent having an associated listening rule for filtering said notification and for notifying said software application program. One would be motivated to do so to allow preventing false notification to be transmitted.

As to claim 8, Lamb teaches the system of claim 7 wherein said plurality of software observation agents are operable by said plurality of server based computers (column 22, lines 30-34).

As to claim 9, Lamb teaches the system of claim 8 wherein said plurality of software notify agents are operable by said plurality of server based computers (column 22, lines 26-39, Lamb discloses a form of inter-process communication can be used to allow the agents to communicate with the hosting servers).

As to claim 10, Lamb teaches the system of claim 9.

Lam fails to teach explicitly software listening agent.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide software listening agent is operable by said client based computer. One would be motivated to do so to allow monitoring the network.

As to claim 11, Lamb teaches the system of claim 10 wherein each of said plurality of software observation agents and each of said plurality of notify agents and said software listening agent is a JAVA program (column 29, lines 14-18, Lamb discloses the user agent interface may include a version of a Java-based software application).

As to claim 12, Lamb teaches the system of claim 7 further comprising, user input consol for changing said observation rule (column 64, lines 6-9, Lamb discloses a special console specifically designed for the system of the invention can be provided in the form of a dedicated computing system to carry out the aspects of the invention related to the user client interface 250).

As to claim 13, Lamb teaches the system of claim 12 wherein said user input console for changing said notify rule (column 64, lines 6-9, Lamb discloses a special console specifically designed for the system of the invention can be provided in the form of a dedicated computing system to carry out the aspects of the invention related to the user client interface 250).

As to claim 14, Lamb teaches the system of claim 13, wherein there is said user console (column 64, lines 6-9, Lamb discloses a special console specifically designed for the system of the invention can be provided in the form of a dedicated computing system to carry out the aspects of the invention related to the user client interface 250).

Lamb fails to teach listening rule.

However, Nelson teaches listening rule (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide user console for changing said listening rule. One would be motivated to do so to allow monitoring the network.

As to claim 15, Lamb teaches a computer product for use with a database management system including a plurality of server based computers having a plurality of distributed databases for storing data, a client based computer for operating a software application program, and a communication network connecting said plurality of server based computers and said client based computer(figure 3; figure 4); said computer product comprising:

computer usable medium having computer readable program code embodied therein for use with said plurality of server based computers for causing a plurality of software observation agents assigned to said plurality of distributed databases, with one software observation agent associated with a different one of said plurality of distributed databases for detecting changes in said data in the associated database (figure 11; column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is

interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected));

each of said software observation agent having an associated observation rule, and for generating an observation in response thereto communicated over said communication network; computer usable medium having computer readable program code embodied therein for use with said plurality of server based computers for causing a plurality of software notify agents which receive said observation from said plurality of software observation agents, each of said plurality of software notify agents having an associated notify rule and for generating a notification in response thereto communicated over said communication network (column 12, lines 1-16, Lamb discloses all call processing logic is placed in user agent software that performs in the telecommunications hosting server. The telecommunication network server is interfaced to the public telephone switching equipment, detects and monitors call connections; column 51, lines 42-60, Lamb discloses the association may be programmed to change at different times of the days or night on in response to certain events that occur or that are programmed into the user agent (as can be tracked and detected)); and

Lamb fails to teach explicitly computer usable medium having computer readable program code embodied therein for use with said client based computer for causing a software listening agent for receiving said notification from said plurality of software notify agents via said communication network.

However, Nelson teaches software listening agent (column 3, lines 3-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide computer usable medium having computer readable program code embodied therein for use with said client based computer for causing a software listening agent for receiving said notification from said

plurality of software notify agents via said communication network. One would be motivated to do so to allow monitoring the network.

Lamb fails to teach explicitly software listening agent having an associated listening rule for filtering said notification and for notifying said software application program.

However, Nelson teaches filtering (figure 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamb in view of Nelson to provide software listening agent having an associated listening rule for filtering said notification and for notifying said software application program. One would be motivated to do so to allow preventing false notification to be transmitted.

4. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall
Patent Examiner
Art Unit: 2157

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